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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,859	05/11/2006	Jun Kitahara	09947.0009	3333

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EXAMINER

VAUGHAN, MICHAEL R

ART UNIT	PAPER NUMBER
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2431

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06/02/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/578,859	Applicant(s) KITAHARA ET AL.	
	Examiner MICHAEL R. VAUGHAN	Art Unit 2431	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5, 7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-5, 7, and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on **5/4/09** has been entered.

Claims 1, 6, and 9 have been canceled. Claims 2, 5, 7, and 8 have been amended. Claims 2-5, 7 and 8 are pending.

Response to Amendment

Claim Rejections - 35 USC § 101

Current amendments overcome the previous 101 rejections.

Claim Rejections - 35 USC § 112

Current amendments overcome the previous 112 rejections.

Response to Arguments

Applicant's arguments filed 5/4/09 have been fully considered but they are not persuasive. Applicant's arguments are directed to the newly amended limitation in the independent claims. Applicants assert that the prior art of record fails to teach the new limitation but the Examiner respectfully disagrees. Giving the new limitation its broadest reasonable interpretation, it appears to be claiming that while the system is reproducing a first content, the system is simultaneously receiving a second content and will reproduce it after the first content provided the license information is correct. In looking at the Revital reference in its totality, it is describing a content reproduction system similar to digital satellite television. Scrambled content with license information is being broadcasted to the receiver for output onto a TV (col. 3, lines 5-15). Broadcasting or streaming content meets the newly added limitation. That is precisely how digital encrypted broadcasting is performed. The receiver is both receiving content and reproducing already received content provided the licenses/keys are valid. License information can be received from the packet stream or via out of band communication such as a phone line. Video for instance is packetized and scrambled for broadcast. While content in one packet has been decrypted and is being shown on the TV, the receiver is already receiving subsequent packets for processing and they too are transmitted to the TV. Various keys and key updates are constantly being transmitted to the receivers for managing the security of the system and its content, while the

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content is constantly being displayed for the user. The system does not stop processing while receiving new license information.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-5, 7, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 7,739,548 to Revital et al, hereinafter Revital in view of USP Application Publication 2002/0001386 to Akiyama.

As per claim 2, Revital teaches an information processing apparatus adapted for managing licenses used in a contents distribution service having a channel for distributing a plurality of available content (col. 10, lines 5-7), the apparatus comprising:

first acquisition means for acquiring a first license [first layer] having a utilization condition [access to protected content] for the plurality of available content, the first license further including first key information (col. 5, lines 5-7 and col. 10, lines 10-15);

second acquisition means for acquiring, along with a content from among the plurality of available contents, a second license [second layer] which prescribes, in a

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manner different from transmitting the first license, utilization condition [assess to particular items or portions] for the transmitted content (col. 5, lines 9-10);

control means for controlling output of the acquired content when the utilization condition of the first license and the utilization condition prescribed by the second license are both satisfied, the transmitted contents is permitted to be utilized at the information processing apparatus [properly decrypted] (col. 5, lines 35-37);

wherein when the plurality of available contents are distributed via the channel successively in terms of time, the second acquisition means acquires, during the reproduction of a first content, the second license which prescribes the second utilization condition of a second content distributed subsequent to the first content, and the control means controls reproduction of the second content so that the second content is reproduced subsequent to the first content when the first utilization condition prescribed by the first license and the second utilization condition prescribed by the second license are both satisfied (col. 3, lines 5-15).

Revital is silent in explicitly disclosing the first license has a digital signature and that second license further includes identification information of a first license corresponding to the second license, second key information, and an electronic signature. Akiyama teaches using digital signatures to secure the transportation of licenses (0107). Akiyama goes on to teach why using digital signatures secure transactions from alteration (0113). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine this feature to the licenses of Revital to ensure the licenses are not altered. Akiyama teaches a system whereby a

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first control information [first license] can be updated by a second control information [second license] which includes identifying information of the first license in order to update it as needed. Akiyama's second control information includes an identifier which specifies the first license and its information. It specifies the first license, so that it can be used to replace certain elements of the first license (0103). Specifically it can change permissions of the subscriber and the decryption keys. Akiyama system also allows for the updating of license information over an out of band channel to greater increase the systems security. Substituting known methods into similar systems which yield predictable results is within the ordinary capabilities of one of ordinary skill in the art. Using out of band updates to licenses improves the security of the system and integrates well with Revital's system. Revital teaches remotely renewing security elements without the need for physical proximity. Sending the renewable security elements through a phone line is one way of performing this feature without the need to a physical security element proximate to the receiver.

As per claim 3, Revital teaches that during the manufacture of the recipient module an embedded key is stored in the hardware (col. 4, lines 38-42). Revital also teaches that any method of suitable encryption mechanism may be used for encrypting the various types of keys in his invention (col. 9, lines 52-53). Even though Revital does not explicitly call any of the secret keys, public-keys, it would be obvious to one of ordinary skill in the art that public key cryptography could easily be used in this case. The private stored key in the device would be the device's own unique private key. Then, any entity who wishes to create a session key (as taught by Revital and Akiyama)

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would simply encrypt the session key with the device's public key so only that specific device could decrypt the message and obtain the session key. Revital even teaches encrypting one key with another. Akiyama teaches public key cryptography as means of transmitting license information (0111). This is a well established algorithm of key exchange. Anyone of ordinary skill in the art would readily use this algorithm. Therefore it would have obvious to one of ordinary skill in the art at the time of the invention to use the well known public key cryptography as a suitable encryption mechanism as Akiyama teaches.

As per claim 4, Revital teaches the second key included in the second license is encrypted and the control means decrypts, by using the first key information, encrypted second key information and uses the second key information to decrypt the acquired content (col. 5, lines 10-16).

As per claim 7, Revital teaches a method of processing content provided by a contents distribution service having a channel for distributing a plurality of available content (col. 10, lines 5-7), the method comprising:

a first acquisition step of acquiring a first license [first layer] having a utilization condition [access to protected content] applied in common for the plurality of available content, the first license further including first key information (col. 5, lines 5-7 and col. 10, lines 10-15);

a second acquisition step of acquiring, among the plurality of available contents, a second license [second layer], that has a utilization condition [access to particular items or portions] for the acquired content (col. 5, lines 9-10);

an output step of playing the acquired content to a user when the utilization condition prescribed by the first and second license are both satisfied [properly decrypted] (col. 5, lines 35-37);

wherein when the plurality of available contents are distributed via the channel successively in terms of time, the second acquisition means acquires, during the reproduction of a first content, the second license which prescribes the second utilization condition of a second content distributed subsequent to the first content, and the control means controls reproduction of the second content so that the second content is reproduced subsequent to the first content when the first utilization condition prescribed by the first license and the second utilization condition prescribed by the second license are both satisfied (col. 3, lines 5-15).

Revital is silent in explicitly disclosing the first license has a digital signature and that second license further includes identification information of a first license corresponding to the second license, second key information, and an electronic signature. Akiyama teaches using digital signatures to secure the transportation of licenses (0107). Akiyama goes on to teach why using digital signatures secure transactions from alteration (0113). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine this feature to the licenses of Revital to ensure the licenses are not altered. Akiyama teaches a system whereby a first control information [first license] can be updated by a second control information [second license] which includes identifying information of the first license in order to update it as needed. Akiyama's second control information includes an identifier which

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specifies the first license and its information. It specifies the first license, so that it can be used to replace certain elements of the first license (0103). Specifically it can change permissions of the subscriber and the decryption keys. Akiyama system also allows for the updating of license information over an out of band channel to greater increase the systems security. Substituting known methods into similar systems which yield predictable results is within the ordinary capabilities of one of ordinary skill in the art. Using out of band updates to licenses improves the security of the system and integrates well with Revital's system. Revital teaches remotely renewing security elements without the need for physical proximity. Sending the renewable security elements through a phone line is one way of performing this feature without the need to a physical security element proximate to the receiver.

As per claim 8, Revital teaches a computer readable medium comprising a method of processing content provided by a contents distribution service having a channel for distributing a plurality of available content (col. 10, lines 5-7), the method comprising:

a first acquisition step of acquiring a first license [first layer] having a utilization condition [access to protected content] applied in common for the plurality of available content, the first license further including first key information (col. 5, lines 5-7 and col. 10, lines 10-15);

a second acquisition step of acquiring, among the plurality of available contents, a second license [second layer], that has a utilization condition [access to particular items or portions] for the acquired content (col. 5, lines 9-10);

an output step of playing the acquired content to a user when the utilization condition prescribed by the first and second license are both satisfied [properly decrypted] (col. 5, lines 35-37);

wherein when the plurality of available contents are distributed via the channel successively in terms of time, the second acquisition means acquires, during the reproduction of a first content, the second license which prescribes the second utilization condition of a second content distributed subsequent to the first content, and the control means controls reproduction of the second content so that the second content is reproduced subsequent to the first content when the first utilization condition prescribed by the first license and the second utilization condition prescribed by the second license are both satisfied (col. 3, lines 5-15).

Revital is silent in explicitly disclosing the first license has a digital signature and that second license further includes identification information of a first license corresponding to the second license, second key information, and an electronic signature. Akiyama teaches using digital signatures to secure the transportation of licenses (0107). Akiyama goes on to teach why using digital signatures secure transactions from alteration (0113). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine this feature to the licenses of Revital to ensure the licenses are not altered. Akiyama teaches a system whereby a first control information [first license] can be updated by a second control information [second license] which includes identifying information of the first license in order to update it as needed. Akiyama's second control information includes an identifier which

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL R. VAUGHAN whose telephone number is (571)270-7316. The examiner can normally be reached on Monday - Thursday, 7:30am - 5:00pm, EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. R. V./

Examiner, Art Unit 2431

/William R. Korzuch/
Supervisory Patent Examiner, Art Unit 2431